

S/N 10/774,969

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Claims

1-26. (cancelled)

27. (currently amended) A multi-speed transmission comprising:
an input shaft;
an output shaft;
a stationary member;
first, second and third planetary gear sets each having first, second and third members;
a first and second input clutch connected with said input shaft;
said second member of said second planetary gear set being continuously connected with said second input clutch;
a first interconnecting member continuously interconnecting a member of said second planetary gear set with a member of said third planetary gear set;
and
nine torque-transmitting mechanisms for selectively interconnecting said members of said first, second or third planetary gear sets with said first or second input clutch, said output shaft, said interconnecting member, said stationary member or with other members of said planetary gear sets, two of said nine torque-transmitting mechanisms being selectively operable for interconnecting said first and second members of said first planetary gear set with a first member of said second planetary gear set and said output shaft, said nine torque-transmitting mechanisms being engaged in combinations of at least three to establish at least five forward speed ratios and a reverse speed ratio between said input shaft and said output shaft.

28. (currently amended) The transmission defined in claim 27, wherein [a] the first and second of said nine torque-transmitting mechanisms are selectively operable for interconnecting [a] the first member and a second member of said first planetary gear set, respectively, with said first input clutch.

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29. (cancelled)

30. (currently amended) The transmission defined in claim 27, wherein [a] the fifth and sixth of said nine torque-transmitting mechanisms are selectively operable for interconnecting members of said second planetary gear set with members of said third planetary gear set.

31. (currently amended) The transmission defined in claim 27, wherein [a] the seventh of said nine torque-transmitting mechanisms is selectively operable for interconnecting a member of said first planetary gear set with said stationary member.

32. (currently amended) The transmission defined in claim 27, wherein [an] the eighth and ninth of said nine torque-transmitting mechanisms is selectively operable for interconnecting members of said third planetary gear set with said stationary member.

33. (currently amended) The transmission as defined in claim 27, further comprising a tenth torque-transmitting mechanism, wherein three of said ten torque-transmitting mechanisms are selectively operable for interconnecting said first, second and third members of said first planetary gear set with a first member of said second planetary gear set and said output shaft.

34. (currently amended) The transmission defined in claim 33, wherein [a] the first and second of said ten torque-transmitting mechanisms are selectively operable for interconnecting [a] the first member and [a] the second member of said first planetary gear set, respectively, with said first input clutch.

35. (cancelled)

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36. (currently amended) The transmission defined in claim 33, wherein [a] the sixth and seventh of said ten torque-transmitting mechanisms are selectively operable for interconnecting members of said second planetary gear set with members of said third planetary gear set.

37. (currently amended) The transmission defined in claim 33, wherein [an] the eighth and ninth of said ten torque-transmitting mechanisms are selectively operable for interconnecting members of said first planetary gear set with said stationary member.

38. (currently amended) The transmission defined in claim 33, wherein [a] the tenth of said ten torque-transmitting mechanisms is selectively operable for interconnecting a member of said third planetary gear set with said stationary member.

39. (currently amended) The transmission defined in claim 33, wherein said first, second and third members of said planetary gear sets comprise a sun gear member, a ring gear member and a planet carrier assembly member, and wherein the planet carrier assembly members of a plurality of said planetary gear sets are of the single pinion ~~type~~ carriers.

40. (currently amended) The transmission defined in claim 33, wherein said first, second and third members of said planetary gear sets comprise a sun gear member, a ring gear member and a planet carrier assembly member, and wherein the planet carrier assembly members of a plurality of said planetary gear sets are of the double pinion ~~type~~ carriers.

41. (original) The transmission defined in claim 33, wherein each of said ten torque-transmitting mechanisms comprises a synchronizer.

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42. (original) The transmission defined in claim 33, wherein said first input clutch is applied for odd number speed ranges and said second input clutch is applied for even number speed ranges.

43. (original) The transmission defined in claim 33, wherein said first input clutch is applied for even number speed ranges and said second input clutch is applied for odd number speed ranges.

44. (original) The transmission defined in claim 33, wherein selected ones of said ten torque-transmitting mechanisms are engaged prior to gear shifting to achieve shifting without torque interruptions.